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JAN 9 1995

**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY**

January 9, 1995

Secretary
Federal Communications Commission
1919 M Street, NW, Room 239
Washington, DC 20554

DOCKET FILE COPY ORIGINAL

**Re: Revision of the Commission's
rules to ensure compatibility
with enhanced 911
emergency calling system**

**CC Docket No. 94-102
RM-8143**

Dear Secretary:

Enclosed herewith for filing with the Commission are the original and nine copies of the TDI, et al's Comments in the above-captioned matter.

Should there be any questions, please do not hesitate to contact me.

Sincerely,

Alfred Sonnenstrahl

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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JAN 9 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)

Revision of the Commission's rules)
to ensure compatibility with enhanced)
911 emergency calling system)

CC Docket No. 94 - 102
RM-8143

Comments of

DOCKET FILE COPY ORIGINAL

Telecommunications for the Deaf, Inc.

on behalf of

Alexander Graham Bell Association for the Deaf
American Association of the Deaf-Blind
American Athletic Association of the Deaf
American Deafness and Rehabilitation Association
American Society for Deaf Children
Association of Late-Deafened Adults
Conference of Education Administrators Serving the Deaf
Convention of American Instructors of the Deaf
Deaf and Hard of Hearing Entrepreneurs Council
Deaf Women United
Maryland Association of the Deaf
National Association of the Deaf
National Black Deaf Advocates
National Center for Law and Deafness
National Congress of Jewish Deaf
National Fraternal Society of the Deaf
National Hispanic Council of the Deaf and Hard of Hearing
Oral Hearing Impaired Section of AGBAD
Registry of Interpreters for the Deaf
Self Help of Hard of Hearing People
Telecommunications for the Deaf, Inc.

Introduction

Telecommunications for the Deaf, Inc., on behalf of 21 national organizations serving deaf and hard of hearing Americans of all ages (TDI, et al) hereby submit these comments to the Federal Communications Commission in response to its Notice of Proposed Rulemaking (NPRM) regarding 911 emergency calling systems, CC Docket No. 94 - 102.

TDI, et al recognizes the main purpose of this NPRM is to solicit comments to ensure compatibility of PBX equipment and wireless systems such as mobile radio services to the enhanced 911 emergency calling systems. However, it should be noted some of the same concerns and problems that exist for those who use PBX and wireless systems also exist for text telephone (TTY) users and solutions need to be incorporated in the rulemaking process in order to be standardized.

Ensure That TTY Users Have ALI/ANI Services When Available to Others

In the NPRM, the fact that PBX users and mobile radio service users do not currently have the benefit of Automated Location Identification (ALI) is an important concern. In locations where fully enhanced 911 calling systems exist, TTY users need assurance that they, too, will have the benefit of ALI and Automated Number Identification (ANI) or at minimum ANI. Currently, TTY calls into 911 emergency systems are handled in a number of ways. Steps should be taken to ensure that if a TTY user is located in an area that has fully enhanced 911, and the user calls 911, that they be assured ALI and is initiated. Thus, when a TTY call is placed and the 911 PSAP identifies it as a TTY call, ANI/ALI should be recorded before the call is transferred to a TTY designated extension. Our understanding is TTY calls are often transferred to designated extensions that are usually geographically separate from the operator console. In your rulemaking, you need to make sure the advantages of enhanced 911 are available equally to all callers, including TTY users, as a matter of safety and security.

Identification of TTY Calls Coming Into the 911 System

Requirements for proper identification of incoming TTY calls in a timely, functionally equivalent manner needs to be in place for TTY users. The Americans With Disabilities Act requires direct access to 911 emergency calling systems, and requires training of personnel to handle TTY calls properly. Yet, we are still hearing from our members that identification and response to TTY calls by 911 PSAPs in a timely fashion is not happening. (Note: Los Angeles and Berkeley, California 911 case settlements with US Department of Justice, DOJ, 1994). Perhaps, if steps were taken by the FCC to regulate rules that help ensure prompt identification and handling of 911 TTY calls, the system could finally be considered functionally equivalent. At this time, we can say without hesitation TTY users are still fearful their calls will not be handled in a timely, functionally equivalent manner. The national community of TTY users has a great lack of confidence in the system the way it is set up now with just cause.

Ironically, equipment does exist that can identify an incoming TTY call by it's baudot tones and alert the operator. We have tried to educate our members on the need to send a few baudot tones to alert 911 personnel to incoming calls, but the truth is it should not be, according to the DOJ, the responsibility of the TTY user to send this alert. 911 emergency systems need to be prepared and regulated to avoid mishandling TTY calls. It is common to hear stories of TTY users needing to call 911 three or four times before they actually link up with 911 personnel and have dialogue via TTY. This is unacceptable in emergency situations where every moment counts. It would be wise to add to your requirement that equipment which identifies TTY calls be in place in all PSAP locations.

Functionally Equivalent Access of TTY Users to the 911 Emergency System

Our understanding is that the FCC is responsible to make sure that TTY users, as non-voice users, have functionally equivalent access to the telephone network as voice users. Perhaps some thought is

needed of adding regulations that assure TTY calls will be handled in as timely a fashion as possible within the available and future technology used by TTY users. Currently, regulations are strongly recommended to include 1) speed in transmission of text; 2) the ability to interrupt and inject a point or question where dialogues are emergency personnel-centered; and 3) voice-carry-over (VCO) and hearing-carry-over (HCO) systems.

Traditionally, TTYs transmit at 45.5 baud, a maximum typing speed equivalent to 60 words per minute (compared to voice speed of 200 words per minute). Additionally, there is no way one can interrupt to inject a question or detail in the traditional baudot format. The other telecommunications option for TTY users is ASCII code which, under current conditions, must be avoided especially in the 911 emergency calling system environment. ASCII depends on a constant tone to maintain a connection, creating the problem of a call easily being disconnected. In other words, tone in ASCII calls tend to be disrupted and get disconnected while being on hold, or switched or transferred to another station which is common in emergency centers. This is why the DOJ issued clarification on their requirement of access to 911 centers via baudot only until future technology proves that ASCII is durable, reliable and effective in all emergency related situations.

Currently, technology is available in newer TTYs to allow for interrupt capabilities, "real-time transmission of typed text based on typing speed" and one-way voice communication with one-way text communication for VCO users, who could rely on reading text and can talk, and HCO users who could hear and express by typing text. This type of technology is dependent on both TTY users having this capability, but it still allows those who don't have current TTY equipment to communicate with each other. Therefore, to ensure the most timely and efficient communications, it is most appropriate that real-time transmission of typed text with interrupt/VCO/HCO capabilities be required in all 911 emergency calling systems. This would enable TTY callers to have access to 911 that is more functionally equivalent to that now enjoyed by voice callers, and is crucial to the safety and timeliness of many 911 calls.

Enhanced 911 With Wireless TTY Access

As organizations that represent the majority of TTY users in this country, we are pleased you have "flagged" the need for TTY access in reference to wireless services. We appreciate the fact that as new technology and new regulations are implemented, TTY users are considered at the forefront and not as an afterthought. Unfortunately, it is really not clear exactly what you are proposing be implemented in this area.

Please clarify more precisely what is required within one year of the effective date of this order for TTY users in relation to wireless systems. Are you proposing that all available mobile radio phones be usable by TTY users via the phone itself or simply be a part of required access to the 911 system? In your NPRM, you have stated the "radio services must be capable of permitting access by individuals with speech or hearing disabilities through means other than mobile radio handsets, e.g., through the use of a TTY device. To the extent radio services are accessible to TTY devices today, those services will be able to provide access to 911 service."

If it is within your jurisdiction to mandate that mobile radio phones be required to accommodate TTY users within the usability of the product, we would strongly recommend you do so. Currently, TTY users have limited use of cellular phones due to the configuration, size and volume level of many of these phones in relation to the TTY acoustic cups. Direct connect capabilities on mobile radio telephones could be an advantage to persons using TTYs in noisy environments and should be considered as part of the offering of each manufacturer. Therefore, if the mobile radio telephone industry could be required to offer units with an RJ11 jack for direct input that would be of value to TTY users. Without this provision, TTY users are largely left out from being able to take advantage of mobile radio phones.

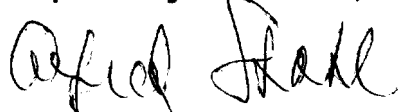
Future Technology

To ensure continuous equivalent functionality and compatibility of TTY systems with current and future emergency calling systems, there should be no regulation intended to discourage or impair the development of improved technology that fosters the availability of visual telecommunications for TTY users and emergency calling systems.

In Closing

On behalf of TTY users, we commend you for your effort to flag TTY access in this rulemaking process, and hope that you will take all of the above concerns and suggestions under consideration for inclusion in your final amendments to Part 68. If this NPRM is not the appropriate time to implement some of these needed suggestions, let this document serve as an official petition to see that these concerns are addressed via another rulemaking process. Our hope is that the above concerns regarding ALI/ANI, functional equivalent access to 911 calling systems, and wireless TTY access can all be addressed within this rulemaking. If not, please advise us otherwise.

Respectfully submitted,



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